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SDMS DocID

462034

November 21, 2005

GeoInsight Project 2491-001

Frank Gardner  
U.S. Environmental Protection Agency  
One Congress Street, Suite 1100-HBR  
Boston, Massachusetts 02114-2023

Superfund Records Center  
SITE: Wells G+H  
BREAK: 2.6  
OTHER: \_\_\_\_\_

RE: Seventeenth Progress Report  
Administrative Order on Consent for Removal Action  
Wells G&H Superfund Site  
Olympia Nominee Trust Property  
60 Olympia Avenue  
Woburn, Massachusetts  
CERCLA Docket # 01-2004-0059

Dear Mr. Gardner:

GeoInsight, Inc. (GeoInsight) prepared this progress report to describe activities completed at 60 Olympia Avenue in Woburn, Massachusetts (the Site) during the seventeenth progress report period (October 21, 2005 to November 21, 2005). This letter was prepared in accordance with the June 21, 2004 United States Environmental Protection Agency (USEPA) Administrative Order on Consent for Removal Action (CERCLA Docket No. 01-2004-0059; the "Order"). The letter was prepared by GeoInsight on behalf of Olympia Nominee Trust, current owner of the 60 Olympia Avenue property.

Please find the attached Work Plan Implementation Schedule (the "Schedule"). The status of specific tasks is presented below.

#### **Liquid Permanganate Delivery**

On October 27, 2005, road maintenance was conducted to facilitate access to storage containers for permanganate delivery during periods of seasonal high ground water. On October 28, 2005, thirty five 55-gallon drums of sodium permanganate were delivered to the Site. The drums of sodium permanganate are stored in three 20-foot storage containers on Site.

### **Liquid Permanganate Injection**

On November 3, 2005, GeoInsight conducted the fifth sodium permanganate injection event. GeoInsight injected the contents of twenty 55-gallon drums into 47 injection wells within the containment cell. Each injection well received approximately 15 to 25 gallons of permanganate, except for three wells (E2, E4, and F2) receiving less than ten gallons and nine wells (A3, A5, B2, B3, G2, G3, G4, J1, and J3) receiving approximately 25 to 32 gallons.

On November 10, 2005, GeoInsight conducted the sixth sodium permanganate injection event. The contents of twenty 55-gallon drums were injected into five shallow trenches (T1 through T5) within the containment cell. Approximately 176 gallons of sodium permanganate were injected into each trench.

The approximate volumes of sodium permanganate injected into each trench and injection well are summarized on the attached Tables 1 and 2. Table 1 also includes the volume of drum rinsate water for each injection event.

The next scheduled injection event will be November 22, 2005.

### **Permanganate Monitoring**

Permanganate monitoring was conducted on October 20, 25, 27 and November 9, 2005 during this reporting period. Injection and monitoring wells were visually monitored for color using a clear PVC bailer or geopump and clear tubing. Monitoring well couplets and triplets on the inside and outside of the containment cell, respectively, were gauged to obtain hydraulic information.

### **DNAPL Recovery**

Additional DNAPL was not observed after September 27, 2005 in injection wells B-1, B-3, G-2 and G-3. The following table summarizes observations and approximate thicknesses of DNAPL.

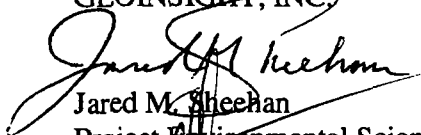
<b>Date</b>	<b>B1</b>	<b>B3</b>	<b>G2</b>	<b>G3</b>
September 6, 2005	Not observed	2 inches	Not observed	Not observed
September 8, 2005	Not observed	0.5 inches	Not observed	Not observed
September 13, 2005	Not observed	4 inches	Not observed	Not observed
September 16, 2005	4.5 inches	Not observed	Not observed	Not observed
September 19, 2005	Not observed	Not observed	Not observed	3 inches
September 22, 2005	4 inches	0.5 inches	Not observed	Not observed
September 27, 2005	1.25 inches	Not observed	0.25 inches	Not observed
October 11, 2005	Not observed	Not observed	Not observed	Not observed
October 25, 2005	Not observed	Not observed	Not observed	Not observed

During this monitoring period DNAPL was not observed. DNAPL is stored in a 30-gallon steel drum (satellite accumulation drum) that is contained inside a 55-gallon steel drum (secondary


containment drum). The satellite accumulation drum is located inside the containment cell south of injection well G3. GeoInsight will continue to monitor the presence of DNAPL in the injection wells and recover DNAPL, if possible.

Please contact us at 978-692-1114 if you have questions or if you would like to discuss this project.

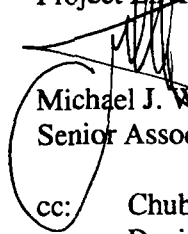
Sincerely,  
GEOINSIGHT, INC.



Jared M. Sheehan  
Project Environmental Scientist



Christene A. Binger  
Project Manager



Michael J. Webster, P.G., L.S.P.  
Senior Associate

cc: Chub Whitten, Olympia Nominee Trust  
David P. Rosenblatt, Esq., Burns & Levinson LLP

Attachments:

Work Plan Implementation Schedule

Table 1 Summary of Sodium Permanganate Injection Volumes - Shallow Injection Trenches

Table 2 Summary of Sodium Permanganate Injection Volumes - Injection Wells

**WORK PLAN IMPLEMENTATION SCHEDULE**  
**60 OLYMPIA AVENUE**  
**WOBURN, MASSACHUSETTS**

<b>TASK DESCRIPTION</b>	<b>SCHEDULE</b>
<b>Permits</b> Submit permit application to Massachusetts Water Resources Authority (MWRA) to drive sheet pile and continue construction activities. MWRA Approval	Completed October 2004  October 26, 2004
<b>Site Preparation</b> Bridge Enhancements for Sheet Pile Crane Brush Clearing	Completed November 2004
<b>Sheet Pile Installation</b>	Completed January 2005
<b>Injection Well and Trench Installation</b> Trenching Horizontal Wells (5 days) Drilling Vertical Wells (10 days)  Monitoring Well Installation Additional Injection Wells	Completed January 2005  Completed February 2005 Completed August 2005
<b>Installation of Liquid Permanganate Delivery System</b> Staging Area for Permanganate Storage  Delivery of Permanganate (70 drums total) Delivery of Permanganate (70 drums total)	Completed May 2005  May 11, 2005 and June 10, 2005 October 7, 2005 and October 28, 2005
<b>Up to 20 Injection Events - Dependent on Site Monitoring</b> (1,000 gallons of NaMnO <sub>4</sub> per event)	1 <sup>st</sup> Injection: September 1, 2005 (Trench) 2 <sup>nd</sup> Injection: September 15, 2005 (Trench) 3 <sup>rd</sup> Injection: September 29, 2005 (Wells) 4 <sup>th</sup> Injection: October 13, 2005 (Trench) 5 <sup>th</sup> Injection: November 3, 2005 (Wells) 6 <sup>th</sup> Injection: November 10, 2005 (Trench) 7 <sup>th</sup> Injection: Scheduled for November 22, 2005 (Wells) 8 <sup>th</sup> Injection: Scheduled for December 8, 2005 (Wells)
<b>Ground Water Monitoring</b> Baseline Deep wells	April 13 and 14, 2005 September 13, 2005

**TABLE 1**  
**SUMMARY OF SODIUM PERMANGANATE INJECTION VOLUMES - SHALLOW INJECTION TRENCHES**  
**60 OLYMPIA AVENUE**  
**WOBURN, MASSACHUSETTS**

Trench	Date	Approximate Injection Volume (Gallons)	Rinsate (Gallons)	Total Volume (Gallons)
T1	9/1/2005	335	86	421
	10/13/2005	182	29	211
	11/10/2005	176		176
				<b>808</b>
T2	9/1/2005	335		335
	9/29/2005		203	203
	10/13/2005	171	9	180
	11/10/2005	176		176
				<b>894</b>
T3	9/1/2005	282	21	303
	10/13/2005	170	1	171
	11/3/2005		14	14
	11/10/2005	176	122	298
				<b>786</b>
T4	9/15/2005	475	121	596
	9/29/2005		41	41
	10/13/2005	187	165	352
	11/3/2005		12	12
	11/10/2005	181	6	187
				<b>1,188</b>
T5	9/15/2005	460	21	481
	10/13/2005	173	6	179
	11/10/2005	173		173
				<b>833</b>
				<b>4,509</b>

**TABLE 2**  
**SUMMARY OF SODIUM PERMANGANATE INJECTION VOLUMES - INJECTION WELLS**  
**60 OLYMPIA AVENUE**  
**WOBURN, MASSACHUSETTS**

Date	Injection Well	Volume (Gallons)	Total Volume Per Well (Gallons)
9/29/2005	A1	19.8	39.86
11/3/2005		20.06	
9/29/2005	A2	20.1	40.09
11/3/2005		19.99	
9/29/2005	A3	19.2	47.61
11/3/2005		28.41	
9/29/2005	A4	21.2	41.74
11/3/2005		20.54	
9/29/2005	A5	20.2	46.37
11/3/2005		26.17	
9/29/2005	B1	20.8	41.51
11/3/2005		20.71	
9/29/2005	B2	21.65	53.13
11/3/2005		31.48	
9/29/2005	B3	27.6	56.02
11/3/2005		28.42	
9/29/2005	B4	26.3	44.74
11/3/2005		18.44	
9/29/2005	C1	19.7	41.83
11/3/2005		22.13	
9/29/2005	C2	9.7	29.25
11/3/2005		19.55	
9/29/2005	C3	13.6	30.82
11/3/2005		17.22	
9/29/2005	C4	5.9	25.13
11/3/2005		19.23	
9/29/2005	C5	20.2	39.87
11/3/2005		19.67	
9/29/2005	D1	19.5	38.83
11/3/2005		19.33	
9/29/2005	D2	19.9	39.57
11/3/2005		19.67	
9/29/2005	D3	20.6	42.16
11/3/2005		21.56	
9/29/2005	D4	9.95	29.96
11/3/2005		20.01	
9/29/2005	E1	19.8	41.04
11/3/2005		21.24	
9/29/2005	E2	14.33	22.23
11/3/2005		7.9	
9/29/2005	E3	18.23	39.38
11/3/2005		21.15	
9/29/2005	E4	8.84	11.8
11/3/2005		2.96	
9/29/2005	E5	19.9	40.47
11/3/2005		20.57	

**TABLE 2**  
**SUMMARY OF SODIUM PERMANGANATE INJECTION VOLUMES - INJECTION WELLS**  
**60 OLYMPIA AVENUE**  
**WOBURN, MASSACHUSETTS**

Date	Injection Well	Volume (Gallons)	Total Volume Per Well (Gallons)
9/29/2005	F1	19.82	38.33
11/3/2005		18.51	
9/29/2005	F2	21.51	27.82
11/3/2005		6.31	
9/29/2005	F3	18.87	43.05
11/3/2005		24.18	
9/29/2005	F4	16.78	39.29
11/3/2005		22.51	
9/29/2005	F5	20.01	41.11
11/3/2005		21.1	
9/29/2005	F6	21.18	45.55
11/3/2005		24.37	
9/29/2005	F7	22.15	42.75
11/3/2005		20.6	
9/29/2005	G1	20.28	40.04
11/3/2005		19.76	
9/29/2005	G2	17.89	44.25
11/3/2005		26.36	
9/29/2005	G3	20.13	45.4
11/3/2005		25.27	
9/29/2005	G4	19.9	45.57
11/3/2005		25.67	
9/29/2005	G5	16.42	36.67
11/3/2005		20.25	
9/29/2005	H1	19.48	39.45
11/3/2005		19.97	
9/29/2005	H2	20.24	40.71
11/3/2005		20.47	
9/29/2005	H3	25.38	44.99
11/3/2005		19.61	
9/29/2005	H4	25.81	46.37
11/3/2005		20.56	
9/29/2005	H5	19.3	40.36
11/3/2005		21.06	
9/29/2005	I1	20.28	39.59
11/3/2005		19.31	
9/29/2005	I2	15.73	36.41
11/3/2005		20.68	
9/29/2005	I3	30.2	50.52
11/3/2005		20.32	
9/29/2005	I4	21.37	41.91
11/3/2005		20.54	
9/29/2005	J1	19.43	44.94
11/3/2005		25.51	
9/29/2005	J2	24.72	43.99
11/3/2005		19.27	
9/29/2005	J3	19.62	45.88
11/3/2005		26.26	
Total Volume		1888.36	1888.36